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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,180	09/18/2003	Douglas Herman Grabenstetter	2002P13749US01	5568

7590 03/14/2005
Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

GARLAND, STEVEN R

ART UNIT PAPER NUMBER

2125

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/665,180

Applicant(s)

GRABENSTETTER ET AL.

Examiner

Steven R Garland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/18/03, 1/15/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The disclosure is objected to because of the following informalities: in paragraph 1 the attorney document number should be deleted. In paragraphs 44,45 a step 3 and step 4 are mentioned however it is not clear what these steps are, since no description is provided about them.

Appropriate correction is required.

2. The drawings are objected to because in figure 1 a list of numbers 1105,1110,1120,11301140, and 1170 appear on the left had side of the figure and it is unclear which element they are associated with. In figure 3 it is unclear how element 3520 is reached , since it is not connected to element 3510 as it appears from the specification it should be. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are

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not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 and its dependent claims are directed to a method of scheduling and appear to be nothing more than mental steps for a person performing a scheduling task, since no physical acts are required to be performed and/or the method does not require that a computer be used to implement the method.

Claim 12 appears to be directed to storing mental steps on a medium, since the instructions are not required to be computer implemented and the instructions on the medium are analogous to descriptive printed matter being stored on a medium.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6 are rejected under 35 U.S.C. 102(b) anticipated by Ho et al.

“Minimizing the number of tardy jobs for m parallel machines” .

Ho et al. teaches a scheduling method which comprises initializing a job set with a set of on time jobs σ , a set of late jobs δ , and a set of jobs to be scheduled π ; selecting a job with a minimum value; determining if the set of jobs will exceed the scheduled due dates; and modifying the set of on time jobs by removing the job if the time is exceeded. See pages 346-347 in the section entitled "job focused approach" and also note page 344 which defines various variables and step 4 on page 346. Also note the use of processing time on page 347.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al. "Minimizing the number of tardy jobs for m parallel machines" as applied to claims 1-6 above, and further in view of Spoltore et al. 2004/0015971.

Ho et al. teaches a scheduling method which comprises initializing a job set with a set of on time jobs σ , a set of late jobs δ , and a set of jobs to be scheduled π ; selecting a job with a minimum value; determining if the set of jobs will exceed the scheduled due dates; and modifying the set of on time jobs by removing the job if the time is exceeded. See pages 346-347 in the section entitled "job focused approach" and also note page 344 which defines various variables and step 4 on page 346. Also note the use of processing time on page 347.

Ho et al. however does not disclose implementing the method on a device, storing the method on a medium, or specifically applying the method to fabricating metal products.

Spoltore et al. 2004/0015971 teaches computer implementing a scheduling system, using the method in various environments, and storing programming on a medium. Note paragraphs 0007,0009-001, 0020,0025-0029, 0031-0043,0054, figure 1 and claims 15-20.

It would have been obvious to one of ordinary skill in the art to modify Ho in view of Spoltore and implement the method on a computer as well as storing the scheduling on a medium for later use in case the computer crashes.

Further it would have been obvious to one of ordinary skill in the art to modify Ho in view of Spoltore and apply the scheduling method to any factory scheduling problem such as scheduling metal working machines to avoid late orders.

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10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brown et al. 5,671,361 ; Smirnov et al. 6,321,133 ; Lesaint et al. 6,578,005, and the article by Dauzere-Peres are all of interest in scheduling.

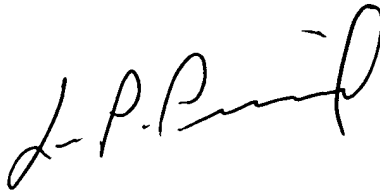
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R Garland whose telephone number is 571-272-3741. The examiner can normally be reached on Monday-Thursday from 6:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached at (571)272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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STEVEN GARLAND



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